

Attorney Docket No.:

RTS-0341

Inventors:

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1. (amended) A compound 16 to 50 nucleobases in length targeted to a 3'-untranslated region, a coding region, a stop codon region, or a 5'-untranslated region of a nucleic acid molecule encoding CD81 of SEQ ID NO: 3, an intron 1 region, an intron 2 region, an intron 3 region, and intron:exon junction region, an exon 1 region, or an exon 8 region of a nucleic acid molecule encoding human CD81 of SEQ ID NO: 11, or a 3'-untranslated region of a nucleic acid molecule encoding human CD81 of SEQ ID NO: 10, wherein said compound specifically hybridizes with one of said regions of said nucleic acid molecule encoding CD81 and inhibits the expression of CD81.

3. (amended) A compound up to 50 nucleobases in length comprising at least a 16 nucleobase portion of SEQ ID NO: 14, 15, 16, 17, 20, 21, 22, 23, 24, 26, 27, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 71, 72, 74, 75, 76, 78, 79, 80, 81, 82, 83, 86, 88 or 89 which inhibits the expression of CD81.

15. (amended) A method of inhibiting the expression of CD81 in cells or tissues comprising contacting said cells or tissues in

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vitro with the compound of claim 1 so that expression of CD81 is inhibited.

Please add the following new claims:

21. The compound of claim 3 which is an antisense oligonucleotide.

22. The compound of claim 21 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

23. The compound of claim 22 wherein the modified internucleoside linkage is a phosphorothioate linkage.

24. The compound of claim 21 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

25. The compound of claim 24 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

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26. The compound of claim 21 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

27. The compound of claim 26 wherein the modified nucleobase is a 5-methylcytosine.

28. The compound of claim 21 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

29. A composition comprising the antisense compound of claim 3 and a pharmaceutically acceptable carrier or diluent.

30. The composition of claim 29 further comprising a colloidal dispersion system.

31. The composition of claim 29 wherein the antisense compound is an antisense oligonucleotide.

32. A method of inhibiting the expression of CD81 in cells or tissues comprising contacting said cells or tissues in vitro with the antisense compound of claim 3 so that expression of CD81 is inhibited. ⁵-